

## VI. CLAIMS

1. A method for repairing a pipe network interconnecting thermal plastic pipe adhesively bonded with thermal plastic fixtures without damaging the fixtures such as to prevent reuse, comprising in combination:

5           severing the thermal plastic pipe to be removed from the thermal plastic fixture spacedly distant from the fixture;

10           placing a heating tool having an elongate cylindrical electrically powered heating head with an external diameter less than the internal diameter of the thermal plastic pipe to be removed within the portion of the thermal plastic pipe that is carried within the fixture;

15           supplying electric power to the heating head to cause heating therein and thereabout to release adhesive bonding between the pipe and the fixture carrying the pipe while maintaining coherence of the pipe and configurational stability of the fixture;

          removing the heating head from the pipe to be removed;

20           inserting an external element of a pipe removal tool, having an elongate handle and a cylindrical extraction element with first and second spacedly separated portion extending perpendicularly therefrom over the outer end portion of the damaged pipe with the first portion between  
25           the damaged pipe and a port of the fixture carrying the

damaged pipe element and the second portion of the extraction element within the channel defined by the pipe; and

30 rotating the handle of the pipe removal tool to rotate the extraction element relative to the pipe to engage the extraction element with the damaged pipe; and

manually moving the pipe removal tool away from the fixture substantially along the extended axis of the pipe to remove the pipe from the fixture.

2. The method of Claim 1 wherein the heating tool comprises in combination:

5 an elongate body having a depending handle to aid manipulation and a trigger guard extending between the handle and body, said trigger guard carrying a trigger to change the state of an off/on switch carried by the trigger guard;

10 a heating head mounting arm extending spacedly forwardly from the body and having a tubular connector in its forward end portion to releasably interconnect a heating head connector arm;

15 a heating head having an elongate body with an electrically resistant heating element carried by a circumferal surface thereof and a connector arm extending axially a spaced distance therefrom and having connecting means to releasably interconnect with the connector of the

heating head mounting arm; and

20 a powering system comprising a source of electric current communicating in series through an off/on switch to the electrically resistive heating element carried by the heating head.

3. The process of Claim 1 further characterized by the pipe removal tool comprising:

5 an elongate rigid handle structurally carrying in its medial portion a perpendicularly extending elongate cylindrical extracting element having diametrically opposed slots, wider than the thickness of the pipe to be removed and extending from the portion of the pipe extraction element distal from the handle inwardly toward the handle to a spaced distance therefrom.